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ABSTRACT

A serious constraint to the development of a modern and diversified industrial base in Saudi Arabia is the critical shortage of skilled manpower. To remedy this deficit, vocational and technical education programs in the country are being revised and expanded. Five secondary-level Vocational Industrial Schools have been established by the Ministry of Education. Graduates of these schools' three-year programs either enter postsecondary programs at the Higher Technical Institute or enter the work force in skilled occupations. Plans are being made for more of these schools to be built and for the curriculum to be revised to increase their student capacity greatly. Higher Technical Institute graduates of three-year programs are recruited for teaching at the Vocational Industrial Schools, while two-year graduates teach in prevocational programs. Many students enter the Vocational Industrial Schools from prevocational training, conducted at three Prevocational Centers (PVCs) for 14-17 year olds, in six-hour days, five days a week. The curriculum in the PVCs also is being revised to provide better training in less time for more students, and three new PVCs are being built. Training for school dropouts and men beyond regular school age is provided by vocational training programs, which have recently been taken over by the Ministry of Education from the Ministry of Labor and Social Affairs. These training programs have been set up by international cousultants on contract to the Saudi Arabian goverament. Additional training is provided by mobile training laboratories, other government ministries, and private companies--all contributing to the success of Saudi Arabian technological development. (KC)

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VOCATIONAL AND TECHNICAL PREPARATION IN SAUDI ARABIA

(Manpower Development Programs Conducted by the Public and Private Sectors)

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Manpower Deficiencies

A serious constraint to the development of a modern and diversified industrial base in Saudi Arabia is the critical shortage of skilled manpower. This shortage has been a nagging problem which is becoming more acute as the economy continues its explosive growth. The late King Faisal recognized this problem when he endorsed vocational education and training. "This country," he declared, "in this particular stage of its development, is in greater need of adopting the vocational trend, because the implementation and carrying out of projects require manpower, and the manpower should be drawn from the country's own sons." (Dunipace, 1977, p. 208) However, because of Saudi Arabia's limited human resources and a shortage of trained manpower, foreign workers are currently providing the bulk of the skilled work force.

Despite this influx of guest workers, it is clear that the indigenous population must be educated and trained for modernization. The mass importation of expatriate workers, therefore, is only a short term remedy to the manpower problem until vocational and technical education/training can produce a skilled Saudi work force.

Manpower - including education, training and level of employment - is one of the important determinants of progress in developing a modern industrial infrastructure. As Table 1 shows there is a big gap between the number of skilled Saudis and non-Saudis employed in various occupations. This table also shows a pool of Saudis classified as semi-skilled and unskilled workers as well as those who are Bedouins. To some extent people in these categories represent a misallocation of human resources. Given appropriate education/training a number of Saudis from this manpower pool, along with young men of school age could provide more of the skilled

Table 1

Estimated Manpower Distribution in

Various Occupational Groups

(Thousands)

Occupational Groups	(1400 AH) 1980 AD Saudi	1980 Non-Saudi
Managers & Officials	8.7	12.4
Professionals	52.9	23.5
Technicians & sub-Professionals	33.4	81.3
Clerical workers	99.6	121.8
Sales workers	97.2	112.6
Service workers	134.5	145.2
Operatives	57.1	51.4
Skilled workers	93.5	101.9
Semi-skilled workers	265.0	162.5
Sub Total	841.9	812.6
Unskilled workers	296.4	-
Farmers	281.0	-
Bedouins	98.7	-
Sub Total	676.1	-
Grand Total	1,518.0	812.6

Source: data from the Ministry of Planning

work force so necessary for nation building.

Manpower Development

The ability to correct manpower deficiencies is recognized as a critical requirement for continued industrial growth and diversification. The Kingdom has, therefore, launched ambitious programs for expanding and improving vocational and technical schooling opportunities. As a result, vocational and technical schools are being established and operated by various government agencies and the private sector.

Vocational and technical education were until just recently the responsibility of the Ministry of Education (MOE) while vocational training was organized and operated by the Ministry of Labor and Social Affairs (MLSA). Under this arrangement, vocational training functioned independent of the general education system. This was true to the extent that potential trainees were seldom referred by MOE schools.[1] In order to correct problems of coordination and redundancy, vocational and technical education was combined with vocational training under a new organization. This Public Organization for Vocational and Technical Education and Vocational Training is governed by an administrative board comprised of members from the private and public sectors.

Vocational and technical schools run by government agencies are completely free and numerous incentives are offered to help in recruiting and retaining students. For example, instructional materials, protective clothing, medical care, meals, transportation to and from

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[1]The principal means of recruiting trainees for vocational programs are "word of mouth" recommendations by graduates and advertisements in print and broadcast media.

school, and frequently housing for unmarried students are now provided. In addition, a monthly stipend is paid so that even those with a need for immediate income can attend. ("Vocational Training," Note 1)

Vocational and Technical Education

The Ministry of Education established five secondary level Vocational Industrial Schools which provide vocational and technical education programs. These schools are located in Riyadh, Jeddah, Hofuf (Al-Hasa), Medina, and Dammam. See Figure 1 for a map of Saudi Arabia.

Students who have completed ninth grade and passed the standardized intermediate certificate exam are eligible for admission, provided they are not above eighteen years of age. The duration of study is three academic years, grades 10, 11 and 12. (Dhallan, Note 2) On the completion of their third year (grade 12) students take a standardized exam. Those who pass this exam receive a vocational secondary education certificate and are entitled to progress on to a post-secondary program at the Higher Technical Institute. ("Educational Statistics," Note 3)

During their first year at a Vocational Industrial School, students rotate through the various programs acquiring basic knowledge, skills and work oriented values. These foundation skills and exploratory experiences, in addition to other considerations, help students make more enlightened vocational/technical program choices. Two years of specialized follow-on study are available in: Electricity - industrial and residential; Metals - forging/heat treating, sheet metal, steel fabrication, welding and machining; and Mechanics - small engines, auto and truck repair. English language training is also included in the school curriculum.

Traditional methods of instruction (lecture/discussions, instructor demonstrations and student exercises) are employed. These methods are

FACTS IN BRIEF

CAPITAL:
RIYADH
LANGUAGE:
ARABIC
POPULATION:
ESTIMATED 6 TO 7 MILLION PEOPLE.
AREA:
ABOUT 725,000 Sq. MILES. EXACT BOUNDRIES ARE LARGELY UNDEFINED. NINETY PERCENT OF THE LAND IS DESERT.
CHIEF INDUSTRY:
OIL. KINGDOM HAS PROVEN RESERVES OF 165 BILLION BARRELS OF OIL AND 94 TRILLION CUBIC FEET OF NATURAL GAS.
EDUCATION:
FREE SCHOOLING IS PROVIDED FOR ALL CITIZENS AT ALL LEVELS. BOYS AND GIRLS ATTEND SEPARATE SCHOOLS.

Figure 1

Locations of Vocational and Technical Education/Training Complexes

augmented by audio-visual aids. In addition to various types of projectors, mock-ups, cutaways, models and other training aids are available to enhance the instructional process. Frequently these training aids are "teacher made."

The first Vocational Industrial School (called the Royal Technical Institute) was opened during 1966 in Riyadh, while the most recent of the five schools began operating just four years ago in a rented facility located in Dammam. The Dammam school now occupies a modern campus type complex which is generously equipped with all the necessary machines, tools and materials. Both the Riyadh and Dammam schools provide an excellent shop and classroom environment which is conducive to effective teaching/learning.

While the number of instructors (most of whom are Saudi Arabs or Egyptians) at the Vocational Industrial Schools is near authorized staffing levels, student enrollment continues to lag behind capacity. Nevertheless, plans call for expanding to thirteen such schools. ("Development Plan," 1975, p. 307) Increased enrollments as well as reduced drop-out and repetition rates are expected, however, when existing programs are upgraded and new specializations such as electronics and petrochemical technology are introduced. Efforts are presently being made in this direction as well as provisions for boarding unmarried students who reside in areas not served by a Vocational Industrial School.

Since most graduates take jobs in the public sector, several companies have begun to recruit new employees and then send them to a Vocational Industrial School for one or two years of study with full pay and benefits. In some cases this is a temporary measure until company training facilities are built; in others it's a cost effective way to

prepare and retain a skilled work force.

The multi-building facility in Riyadh which houses the Royal Technical Institute is also used by the Higher Technical Institute. Students from the Vocational Industrial, Commercial and General Secondary Schools, who pass the standardized secondary certificate exam, can elect to pursue a two or three year post-secondary technical curriculum in the Higher Technical Institute.[2] Both the two and three year programs prepare technicians for the public and private sectors. Graduates are also encouraged to establish their own business with financial assistance from the government in the form of no-interest loans. (Sindi, Note 4) Those who complete the two year program are presently being recruited as potential instructors in pre-vocational and vocational training centers. They receive specialized follow-on training before taking up an instructional assignment. Completion of the three year program is required for teaching in secondary Vocational Industrial Schools. (Mohammid, Note 5)

When the first three Vocational Industrial Schools were established, technical assistance was provided by overseas experts. Specialists from France worked with the school in Jeddah, Italian advisors were posted in Riyadh, and German experts served as advisors to the school in Hofuf. (Muhanna, Note 6) Presently, advisors from Germany are assisting with curriculum additions and improvement, equipment acquisitions and instructor development efforts at all the Vocational Industrial Schools and the Higher Technical Institute.

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[2]The Third Development Plan (1981-1985) provides for a prototype post-secondary polytechnic institute and a model junior college. These alternate forms of post-secondary education will assess the feasibility of expanding occupationally oriented offerings and serving manpower needs by means of such institutions.

Pre-Vocational Training

Since schooling is not compulsory in Saudi Arabia, some youngsters because of family pressures, social background, discipline or for academic reasons, leave school at an early age. Many of these poorly educated adolescents would like a chance to move into the mainstream of employment. However, most face restricted job options because of child labor regulations and/or their lack of preparation for work. Consequently, a number of these young men experience economic hardship or unemployment.

For a sparsely populated country with a serious shortage of trained manpower, this undesirable situation was and is especially tragic. As a corrective measure the MLSA established pre-vocational training for young male drop-outs in the 14-17 age group. This training effort was to provide practical skills and general knowledge which would improve their working career prospects while contributing to the overall manpower needs of the country.

The three-fold purpose formulated for pre-vocational training was to: 1) prepare trainees for re-entry into the general education system, 2) provide an initial orientation in industrial or clerical skills, and 3) prepare trainees for follow-on trade specific training at a vocational training center.

In 1974, with the assistance of an advisor from the United Nations International Children's Emergency Fund, Pre-Vocational Training Centers were set up in Riyadh, Jeddah and Dammam. Figure 1 shows the location of these cities. Each of the centers offered 40-week (1400-hour) training programs in metalworking, electricity, welding, woodworking

and clerical subjects.[3]

This opportunity for occupationally oriented learning appealed to a number of adolescents, particularly those with four to six years of primary school. Records show that over the years some graduates have returned to school to continue their general education. The majority, however, have enrolled in vocational training centers for trade specific training.

Although the pre-vocational training effort has been successful in meeting the needs of many young male school leavers and assisting in the development of a skilled work force, certain opportunities for improvement were recognized. To correct shortcomings in both facilities and training programs, efforts are now being made to: 1) increase the quality and number of Pre-Vocational Training Centers, as well as 2) restructure programs and improve training with innovative instructional methods and materials.

New PVC Facilities

The Pre-Vocational Training Center (PVC) in Riyadh moved from rented premises to a new center in 1977. This center was designed and built in accordance with locally acceptable standards, however, and now requires renovations to existing shops and classrooms as well as the addition of support structures.

Interim PVC facilities in Jeddah and Dammam are being replaced with campus type residential centers. These centers have been designed and will be constructed in conformance with international standards.

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[3]Two-thirds of each 1400-hour instructional program was scheduled for practical skills training with the remainder devoted to general literacy development.

They are to be outfitted with state-of-the-art equipment and furnishings. This modern type of residential training center which will also be built in Al-Hasa, Al-Qasim and Abha, should appeal to students and therefore enhance recruitment and retention. See Figure 1 for a map of Saudi Arabia.

Restructured PVC Training

It is envisioned that future training programs will be conducted six hours a day (four hours of shop and two in a classroom), five days a week for forty weeks.[4] While this results in 200 fewer hours of instruction than presently offered, it is felt that improvements in the program as well as changes in the curriculum and instructional approach will compensate for the loss of time.

In consideration of the relatively low educational attainment, inexperience and age of the typical trainee, the restructured PVC program is designed to provide rudimentary education, limited skill development and varied opportunities for occupational exploration, as well as career counseling. Ideally, the PVC will provide a firm foundation for follow-on trade specific training and serve as a link to vocational training centers. However, given conditions which preclude additional training, the graduate will be prepared to enter the labor force as a semi-skilled worker.

After renovations and new construction, the six PVC's will have an enrollment capacity of up to 350 trainees in nine shops and four office specializations. For purposes of organization and management, the occupational specialties are grouped into five clusters, as can be seen

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[4]Religious observance is on Friday in Saudi Arabia; consequently, classes are conducted Saturday through Wednesday which is the regular work week.

in Table 2. This table also shows planned enrollment figures and instructor assignments.

Trainees enroll in either the Industrial or Clerical section (program of study). Those in the Industrial section will rotate through each of the four clusters: Automotives, Construction, Metals and Electro/Mechanical. After this introductory experience, they will be assisted in selecting a specific cluster in which they will specialize, receiving basic training in each of the included shops.

Students who register for the Clerical section will receive instruction in typing, office machine operation, bookkeeping, filing and other office practices. English language training will also be provided since both English and Arabic are used in business and commerce.

In addition to expanding the availability and training capacity, as well as restructuring the programs of study, innovative changes are being made in curriculum and instruction. Plans call for the implementation of competency based, individualized instruction. This approach has as its objective increased instructor effectiveness as well as trainee achievement. It is especially appropriate considering the cultural circumstances of Saudi Arabia and the open admissions policy in effect. As a result of open admissions, trainees have differing levels of general education, maturity, motivation and experience.

Vocational Training

Responding to the need for trained manpower and taking into account the small number of vocational industrial school graduates and the large number of school drop-outs, the Government looked to vocational training for additional skilled workers. In 1962 an agreement was signed with the International Labor Organization (ILO) to establish a vocational training

Table 2

Pre-Vocational Training Programs

	Cluster	Shops (Occupational Specialties)	Trainees per Shop	Instructors per Shop
Industrial	Automotives	Auto Mechanics	60 to 75	6
	Construction	Woodworking	20 to 25	2
		Plumbing	20 to 25	2
		Construction Electricity	20 to 25	2
	Metals	Machine Shop	20 to 25	2
		Sheet Metal	20 to 25	2
		Welding	20 to 25	2
	Electro/ Mechanical	Industrial (Commercial) Electricity	20 to 25	2
		Air Conditioning and Refrigeration	20 to 25	2
Clerical	Office Occupations	Typing Office Machines Bookkeeping and Filing English Language	60 to 75	6
		Enrollment for a PVC =	280 to 350	

center (VTC) under the aegis of the MLSA. It was decided that VTC enrollment would be restricted to males 18 to 30 years of age who had, as a minimum, completed the fifth grade. A waiver of the age requirement is granted to PVC graduates, when necessary, so that they can continue their training uninterrupted.

In 1963 when the first VTC began operations in Riyadh, it accepted 160 students for training in nine different trades. Later the number of trade specific programs was increased to fourteen, and the enrollment grew to 450 trainees. The agreement with ILO was renewed and expanded to include the start-up of VTC's in Jeddah, Dammam and Al-Qasim. Each of these was built to accommodate 350 trainees.

After the accord with ILO expired in 1969, the MLSA hired specialists from England, on an individual basis, to assist with the expansion of vocational training. These specialists helped establish an instructor training institute, centralized purchasing and a main warehouse in Riyadh. They also prepared a standard syllabus for selected trades. During this same period, additional VTC's were established in Al-Jawf, Abha, Medina, Al-Hasa, Qatif, Hayil, Al-Baha, Tabuk, Wadi Dawasir and Mecca. (Campbell & Bukhary, 1978) See Figure 1 for a map.

In 1976 a project agreement for technical cooperation and advisory services, designed to assist in improving and strengthening the qualitative and quantitative output of VTC's, was signed by representatives of the Kingdom and the U.S. Government.[5] This ongoing project is directed by the MLSA and Office of Foreign Financed Programs in the U.S. Department of Labor's Bureau of International Labor Affairs. The project goal is to

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[5]This project is funded entirely by the Saudi Arabian Government.

build a strong vocational training capacity within the MLSA that will support the Kingdom's development objectives and provide skilled Saudi workers.

The strategies to achieve this goal are: 1) the strengthening of trade training programs by developing innovative instructional materials and appropriate teaching skills, 2) the expansion of the existing training capacity through a program of facility renovation and construction, and 3) the development of those managerial, administrative and procedural skills necessary to operate the vocational training system effectively. Table 3 shows the locations of existing and planned VTC's as well as the various trade training programs.

It was determined that an important means of strengthening vocational training is the development of competency based, individualized and mediated instructional materials.[6] These instructional materials are being produced by teams of specialists using a systems approach.

Subject matter experts translate job requirements into learning objectives. Experts in instructional systems design then transform these objectives into learning sequences, instructional materials and criterion referenced tests, all appropriate for the Saudi population. Instructional materials are augmented by a variety of visual aids (films, slides, graphics, video, etc.) developed by media specialists. These instructional materials (print and non-print) are pilot tested and validated before implementation on a Kingdom-wide basis.

The competencies and their level of attainment which are identified

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[6]Among the reasons for producing instructional materials was the lack of suitable commercial products in Arabic, the language of instruction.

Table 3

Vocational Training Centers and Their Trade Training Programs

Vocational Training Centers / Center Status / Trade Training Programs	Dammam	Jeddah	Riyadh	Abha	Al-Qasim	Al-Baha	Al-Hasa	Al-Jawf	Hayil	Mecca	Medina	Qatif	Tabuk	Wadi Dawasir	Bishah	Jizan	Najran	Tayif
	E	E	E	E	E	E	E	E	E	E	E	E	E	E	N	N	N	N
Air Conditioning & Refrigeration	X	X	X	O	O										O	O	O	O
Auto Body Repair	O	O	O	O	O						O							
Auto Mechanics	X	X	X	X	X	X	X	X	X	X	X	X	X	X	O	O	O	O
Diesel Mechanics[1]	X	X	X	O	X	X	X	X	X	X	X	X	X	X	O	O	O	O
Electricity	X	X	X	X	X	X	X	X	X	X	X	X	X	X	O	O	O	O
Heavy Equipment Operation	O	O	O															
Machine Trades (Shop)	X	X	X	O	X			X										
Office Machine Repair	O	X	X	O	O													
Plumbing	X	X	X	X	X		O		O		O		O		O	O	O	O
Printing	X	X	X															
Radio & Television Repair	X	X	X	X	X		O			O	O							
Sheet Metal	X	X	X	O	X													
Tailoring			X															
Trowel (Building) Trades	O	O	O	X	O	O	X	X	O	X	X	X	O	X	O	O	O	O
Welding	X	X	X	X	X		O	X	O	O	O	X			O	O	O	O
Woodworking (Carpentry)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	O	O	O	O
Trainee Capacity by Ctr.	1000	1000	1000	500	500	300	300	300	300	300	300	300	300	300	300	300	300	300

Note: [1]Presently being taught as a part of Auto Mechanics. To be a separate trade in the near future.

Legend: N New Centers (under construction) O Planned Training Programs
E Existing Centers X Existing Training Programs

in the process of developing instructional materials for each trade training program also serve as standards for a Kingdom-wide trade certification program. (Campbell & Bukhary, 1979, p. 50)

Despite their critical importance in the training strategy, good instructional materials by themselves will accomplish little unless skilled and motivated instructors are trained in their use. Therefore, the project also emphasizes the development of the teaching skills needed to implement the Ministry's vocational training strategy.

Construction of new VTC's, together with the MLSA repair and alteration program, will increase enrollments and serve to correct the imbalances in access to vocational training between and within geographic regions. The training capacity will also be increased through a reduction of the average length of time required for trainees to achieve predetermined skills. This will be accomplished through careful restructuring of the training curricula. The combined effect of construction programs and reduced average training time will be to increase annual capacity for graduates from approximately 2,700 to 7,200 by 1982.

In addition to good materials and trained instructors, the MLSA vocational training system will require skilled managers, an appropriate organizational structure and relevant administrative procedures. Although good administration and management are the keys to the successful operation of any vocational training system, these skills will be especially important in the advanced instructional system being established in Saudi Arabia, which will require careful coordination of training resources and close monitoring of trainee progress.

Special emphasis will also be placed on vocational guidance and recruitment activities, since a vocational training system cannot be

successful unless it attracts and motivates trainees. If the expanded system is to operate near capacity, the annual intake must be increased substantially. Recruitment activities present a special challenge in view of the unfamiliarity of many young Saudis with vocational opportunities.

According to projected plans, the Kingdom-wide Vocational Training System will be completed in 1985. It will be large, decentralized, innovative, and more responsive to the needs of the economy when compared with what previously existed. There will be a strong central directorate and a comprehensive instructor training institute.

A fundamental philosophy underlying this joint Saudi-U.S. effort is that the success of the project will be measured by the extent to which a professional, self-sustaining Saudi leadership is established to manage vocational training. The ultimate test of how well this goal is met will be the capacity of that leadership to adapt training methodology, technology and programs as needs change, without further reliance on technical assistance by overseas experts.

Mobile Training

In order to meet the demand for vocational training in remote parts of the Kingdom, with neither the population density nor employment demand to support a training center, mobile training units are used. Six of these self-contained units became available in 1979. They will increase in number to a total of ten (10) by 1985. ("Development Plan," 1980, Section 5.2) The mobile units, outfitted as shops and classrooms, are equipped with the necessary machines, test equipment, tools and materials for conducting short courses in: welding, auto mechanics or woodworking.

Mobile training units are not intended to supplant PVC's and VTC's, but rather to complement their efforts by providing rudimentary vocational

training to dispersed or isolated rural populations. This outreach effort has proven popular with residents of rural areas for reasons such as: 1) the great distances between outlying villages and cities with training centers, 2) the cultural based objections to a young man leaving his family to live in a city while attending a training center, and 3) the need for basic multi-trade training which will fit a man for employment in his village.

Training by Other Ministries

In addition to the government sponsored vocational and technical programs discussed, other, less than baccalaureate degree, occupational education/training efforts are conducted by various ministries. Their aim is to develop a supply of skilled employees for the public sector. For example, the Ministry of Interior established a Technical Assistants Institute in 1965. This institute offers a two year program of study in surveying, construction supervision, architectural design, road building, water, sewage and hygiene. Graduates are employed by the Ministry of Interior and other government agencies. ("Educational Statistics," Note 3)

The Ministry of Health operates health training institutes. These institutes admit male students who have completed, as a minimum, eighth grade. The three year program of study prepares graduates as: health supervisors; technical assistants for work in a pharmacy, laboratory or operating room; statistical assistants; nutrition assistants or technical nurses. ("Educational Statistics," Note 3)

Excellent vocational and technical training programs are conducted for enlisted personnel by the various branches of the armed forces. Many of these programs provide skills and knowledge directly transferable to a civilian occupation. Since most enlisted men have not completed

secondary school, this option offers another opportunity to get qualified for a skilled job which can be pursued when they are discharged.

Company Training

Quasi-government businesses such as Saudi Arabian Airlines and the Arabian American Oil Company have established modern well equipped and expertly staffed employee training facilities. A wide range of tailor made programs are regularly conducted in these proprietary centers to train and upgrade skilled craftsmen and technicians.

Classroom and shop training is frequently augmented by counterpart and/or in-plant efforts such as vestibule and on-the-job training (OJT). This "over the shoulder" and "hands on" type of training provides the special knowledge, skills and experience required for a specific job. Continuing education in order to update craftsmen and technicians on new technology and trends is provided through short courses, workshops, etc. in Saudi Arabia and abroad. Such efforts enable Saudi Arabs to assume positions of increasing complexity and responsibility.

Multi-national companies, under contract with government agencies, are also providing vocational and technical training. Some even operate and/or monitor training programs designed to help Saudi sub-contractors perform.

Existing inducements for OJT by the private sector include the availability of MLSA training advisors/program consultants (at no cost), legislative incentives and generous government subsidies for approved training. A provision in the Saudi Labor Law requires that every employer of 100 or more employees is to offer vocational/technical training to Saudis in a proportion not less than 5% of the total number of employees.

An annual appropriation of twenty million riyals (approximately

six million U.S. dollars) has been made available through the Ministry of Industry and Electricity for OJT. The training subsidy project is coordinated by the MLSA; however, the rules and procedures for issuing subsidies were stipulated by a Council of Ministers' decree. These rules include provisions for such training to be done within the Kingdom and abroad. ("Rules for Issuing Training," Note 7)

In Quick Appraisal

Men and machinery are pouring into the Kingdom to install the physical foundations of growth. Development in Saudi Arabia is, by most standards, meeting with success. The most important task of development, however, is the cultivation of indigenous manpower to operate the equipment and run the factories.

The key to the Kingdom's economic future is the development of its manpower resources. In the final analysis, many would agree that this is where success resides.

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